

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-9. (Cancelled)

10. (New) A process for numbering objects that are arranged in k columns and n rows on a substrate, the objects receiving a serial number with p digits, composed of digits 1 to s, s+1 to r and r+1 to p, the process comprising steps of:

for each first substrate of a run of 10^s successive substrates, calculating a start value Z for digit s+1 to digit r of the serial number with the formula:

$$Z = (j-1) + (i-1)*n + (m-1)*(k*n),$$

wherein $k*n$ is smaller than 10^s , s is smaller than p, j identifies a line of the object, i identifies a column of the object and m identifies a run of 10^s successive substrates; and sequentially numbering the objects.

11. (New) A process for downwardly numbering objects that are arranged in k columns and n rows on a substrate, the objects receiving a serial number with p digits, composed of digits 1 to s, s+1 to r and r+1 to p, the process comprising steps of:

for each first substrate of a run of 10^s successive substrates, calculating a start value Z for digit s+1 to digit r of the serial number with the formula:

$$Z = D/10^s - ((j-1) + (i-1)*n + (m-1)*k*n),$$

wherein D is a serial number from which downward numbering starts, $k*n$ is smaller than 10^s , s is smaller than p, j identifies a line of the object, i identifies a column of the object and m identifies a run of 10^s successive substrates; and sequentially numbering the objects.

12. (New) A process for processing piles of substrates each containing objects that are arranged in k columns and n rows, the objects receiving a serial number with p digits, composed of digits 1 to s, s+1 to r and r+1 to p, the process comprising steps of:

for each first substrate of a run of 10^s successive substrates, calculating a start value Z

for digit s+1 to digit r of the serial number with the formula:

$$Z = (j-1) + (i-1)*n + (m-1)*(k*n),$$

wherein $k*n$ is smaller than 10^s , s is smaller than p , j identifies a line of the object, i identifies a column of the object and m identifies a run of 10^s successive substrates;
sequentially numbering the objects;
forming piles of q substrates, wherein q is divisible by 10^s with an even result; and
cutting each pile of q substrate along said rows and said columns to form packs of individual objects which are sequentially numbered.

13. (New) The process of claim 12, wherein the piles of q substrates are constituted of q sheets of sequentially numbered objects or q repeat lengths of web transformed into sheets of sequentially numbered objects.

14. (New) A process for processing piles of substrates each containing objects that are arranged in k columns and n rows, the objects receiving a serial number with p digits, composed of digits 1 to s , $s+1$ to r and $r+1$ to p , the process comprising steps of:

for each first substrate of a run of 10^s successive substrates, calculating a start value Z for digit s+1 to digit r of the serial number with the formula:

$$Z = D/10^s - ((j-1) + (i-1)*n + (m-1)*k*n),$$

wherein D is a serial number from which downward numbering starts, $k*n$ is smaller than 10^s , s is smaller than p , j identifies a line of the object, i identifies a column of the object and m identifies a run of 10^s successive substrates;
sequentially numbering the objects;
forming piles of q substrates, wherein q is divisible by 10^s with an even result; and
cutting each pile of q substrate along said rows and said columns to form packs of individual objects which are sequentially numbered.

15. (New) The process of claim 14, wherein the piles of q substrates are constituted of q sheets of sequentially numbered objects or q repeat lengths of web transformed into sheets of sequentially numbered objects.

16. (New) A numbering box for typographic numbering of substrates each carrying $k \cdot n$ items to be numbered, said numbering box being adapted to print the items with serial numbers having p digits, the serial number comprising digits 1 to s , $s+1$ to r and $r+1$ to p ; the numbering box comprising:

sequential actuation means for digits 1 to s , where 10 is smaller or equal to q , wherein q is a number of successively numbered substrates to be collated and processed into piles of q substrates;

individually settable actuation means for digits $s+1$ to r , where a maximum number printable by digits 1 to s and $s+1$ to r is smaller or equal to $k \cdot n \cdot q$; and

sequential actuation means for digits $r+1$ to p .

17. (New) The numbering box of claim 16, comprising corresponding numbering wheels for printing each of the p digits.

18. (New) The numbering box of claim 16, wherein the sequential actuation means for digits 1 to s comprise mechanical actuation means.

19. (New) The numbering box of claim 16, wherein the individually settable actuation means for digits $s+1$ to r comprise independent drive motors.

20. (New) The numbering box of claim 16, wherein the sequential actuations means for digits $r+1$ to p comprise electromechanical initiation means.

21. (New) A numbering machine for numbering banknotes, securities, passports and other similar objects placed on a substrate, the numbering machine comprising the numbering box of claim 16.

22. (New) A numbering machine for numbering banknotes, securities, passports and other similar objects placed on a substrate, the numbering machine comprising the numbering box of claim 17.

23. (New) A numbering machine for numbering banknotes, securities, passports and other similar objects placed on a substrate, the numbering machine comprising the numbering box of claim 18.

24. (New) A numbering machine for numbering banknotes, securities, passports and other similar objects placed on a substrate, the numbering machine comprising the numbering box of claim 19.

25. (New) A numbering machine for numbering banknotes, securities, passports and other similar objects placed on a substrate, the numbering machine comprising the numbering box of claim 20.